fairly represented that of the meeting, and it was supported by Prof. Schäfer, F.R.S., Prof. Gotch, F.R.S., and others.

The individual papers were perhaps fewer than is usually the case. Prof. Sherrington, F.R.S., added another to the series of communications on the coordination of reflex muscular movements in the spinal animal which has added so much to the interest of the British Association meetings in the last few years. Very beautiful examples were shown of graded reflex movements which took place in response to graded stimuli. His experiments throw a good deal of light upon the action of strychnine. This drug appears to cause an exaggeration of the rebound which takes place normally after reflex inhibition. The inhibition may be re-established by giving chloroform. Two practical points were brought out:—(1) that in many cases the physiological units of musculature do not correspond to the anatomical ones; and (2) that there is a portion of the gluteus maximus muscle which does not respond either to ordinary reflex stimulation or to strychnine.

Papers on the physiology of nerve were read by Dr. Alcock and Prof. Macdonald. Interesting in themselves, these communications were rendered doubly so by the fact that their writers take a diametrically opposite view of the nature of the nervous impulse.

Three reports were presented by committees; they dealt, respectively, with the metabolic balance sheet of the individual tissues, the ductless glands, and the effect of climate upon health. Their work evoked more interest than usual. The afternoon was spent in discussing the report of the committee of which Sir Lauder Brunton is chairman, and which is a very strong one. It has worked very hard in its efforts to produce a schedule for the collection of the necessary data for the comparison of the climatic conditions of various localities with the diseases which are prevalent in them. Along another line the committee has been greatly strengthened by the active interest of Prof. Zuntz, who came over to Leicester and gave an account of the work which is now being inaugurated in Berlin.

Prof. Zuntz is continuing the work which he and his collaborators carried on in the high Alps, and at the present time two travellers, Drs. Schilling and Jaffé, are making a corresponding set of observations upon themselves in Togo. It will be of great interest to compare the effects of hot climate with the positive results which were obtained upon the high Alps.

J. BARCROFT.

THE KINGSTON EARTHQUAKE.

THE official report on the Kingston earthquake, of January 14 last, by Mr. Maxwell Hall, contains, in addition to the customary compilation of accounts of time, duration and violence of the shock, some interesting records of the peculiar behaviour of the sea on the north coast of the island. At Annotto Bay and Port Maria the sea receded, about three or four minutes before the shock at Port Maria, at about the same time after it according to the account from Annotto Bay, the amount of the recession being equivalent to a vertical fall of from 12 feet to 20 feet; after the shock the sea returned in a wave which swept up the shore to 6 feet or 8 feet above its normal level. This phenomenon was only recorded at the two localities mentioned, a fact which points to its being probably due to movement of the land rather than to a sea wave. At the Kempshot Observatory, St. James, the masonry pier of the transit instrument, resting on solid rock, was found to have been disturbed, so that the west end of the axis was 32″ higher than the east end. In Kingston Harbour subsidence of the land was noticed along the shore-line, of more than 24 feet in places, but this appears to have been due to the shaking down of loose accumulations of recent deposits, as there is no indication of a permanent change of level in the centre of the harbour or on land except near the shore-line.

Beside the official report, we have received from Prof. Carmody, of Trinidad, a series of photographs taken in Kingston on the second and third day after the earthquake. Two of these are reproduced, which show the character of the damage done; this was greatest in the case of walls facing east, those facing north or south being generally uninjured. A noteworthy peculiarity was the fact that arched openings seem to have withstood the shock while the rest of the wall was destroyed; as there is no form of construction less suited than the arch to withstand the strains set up by an earthquake shock, this can only be ascribed to the badness of material used for building, the arches having stood owing to the necessity for using better material and more skilled workmanship in their construction.

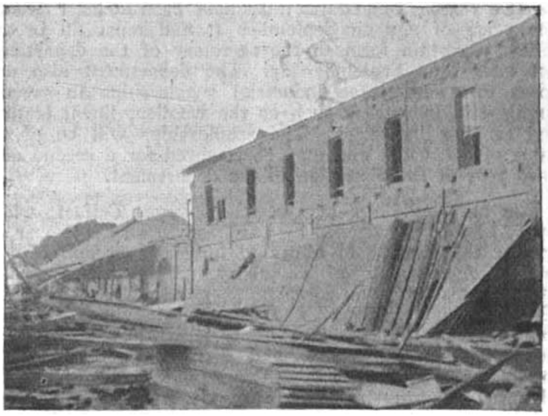

FIG. 1.—Railway station wall facing south.

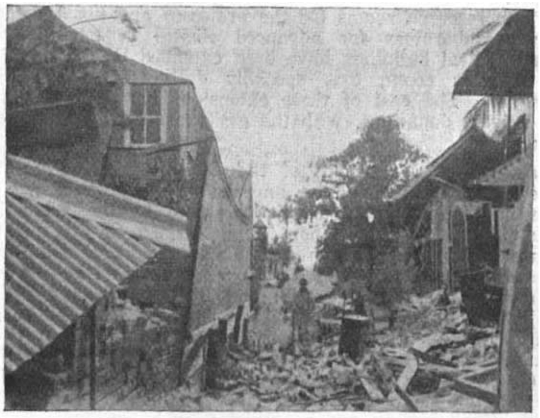

FIG. 2.—Typical north and south narrow street.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

BY the will of the late Mr. A. H. Blount, lord of the manor of Orleton, Hereford, who died in London on June 17, Yale University will receive a bequest the value of which, after payment of duties, &c., will amount to about 80,000*l.*

THE new session of Birkbeck College, London, will be opened on Monday, September 30, when an address will be given by Mr. G. G. Chisholm. The laboratories will afterwards be open to inspection, and demonstrations will be given. There will be an annual exhibition of students' works on Friday, Saturday, and Monday, September 27, 28, and 30.

THE Department of Agriculture and Technical Instruction for Ireland will, next month, award not more than three commercial scholarships to young men having a

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sound general education and some commercial experience. The object of the scholarships is to afford facilities for the holders obtaining training in some higher institution, approved by the department, with a view to their employment as teachers of commercial subjects in Ireland. The scholarships are of the value of 100*l.* each, and are tenable for two years. Candidates must have been at least twenty-one years of age on September 1, and must fill in and return a certain form to the secretary of the department not later than September 25. The department also proposes to award three industrial scholarships to persons engaged in industries, such as the woollen, linen, leather, and tanning industries. The scholarships will be of the value of 80*l.* each, and may be renewed for a second or a third year at the discretion of the department.

THE new buildings in Queen's College, Belfast, which are to be formally opened by Lord Kelvin on September 20, are for the purpose of affording increased accommodation in the departments of chemistry, physics, engineering, natural history and geology, physiology, pathology, medicine, and surgery. The chemical buildings are now completed by the erection of a large lecture room, a lecture preparation room, and a museum for chemical specimens. In physics there are new elementary and advanced laboratories, and in engineering a laboratory, a lecture room, and a drawing office. The additions to the natural history and geological departments include a laboratory for elementary classes in biology, a laboratory for geology and mineralogy, and rooms for advanced classes and private research in zoology and botany. The physiological department has been provided with three new laboratories, viz. for histology, chemical physiology, and experimental work, and the pathological department with private research rooms for the professor and his assistant, and a laboratory for advanced classes in bacteriology. The medical buildings have been extended by the addition of a class room, &c., specially designed for operative surgery. The cost of these extensions has been defrayed by private donations, with the assistance of a Government grant.

A MEDICAL department of the Board of Education has been established to advise and assist in the discharge of the new duties imposed on the Board by the Education (Administrative Provisions) Act in regard to the medical inspection of school children which local education authorities are required by that Act to carry out in England and Wales. The chief duties of the Board in this direction will consist in advising and supervising local education authorities as to the manner and degree in which those authorities carry out this medical inspection; in giving such directions as may be necessary regarding the frequency and method of such inspection in particular areas; and in considering and sanctioning such arrangements as may be proposed under the Act by individual authorities for attending to the health and physical condition of the children. The organisation and *personnel* of the Board's medical department are not yet fully determined; as a first step Dr. George Newman has been appointed chief medical officer of the Board. Dr. Alfred Eichholz, who has for nine years been on the Board's staff as medical inspector of schools, will also be appointed to the medical department, and further appointments will be made in due course. The Board intends in the autumn to issue a circular to local education authorities regarding their new duties in the matter of medical inspection of school children.

SOCIETIES AND ACADEMIES.

PARIS.

Academy of Sciences, September 9.—M. Henri Becquerel in the chair.—The contact phenomena of phonolitic trachyte from Griounot, Cantal: A. **Lacroix.**—Bi-secondary butylene chlorohydrin: Louis **Henry.** The secondary butyl alcohol, $CH_3—CH_2—CH(OH)—CH_3$, was prepared synthetically from ethylmagnesium bromide and aldehyde; this was converted into the secondary iodide, and from this, by the action of alcoholic potash, symmetrical dimethylethylene was prepared. The chlorohydrin results from the interaction of this hydrocarbon and hypochlorous acid. Its physical properties are given.—The resistance of the air: M. **Jouguet.**—Contribution to the study of the alloys of cobalt and tin: F. **Ducelliez.** The present note deals with alloys containing between 57 per cent. and 66 per cent. of tin. The alloys are probably formed of a mixture of CoSn and Co_3Sn_2.—Celestite from Mokattam: M. **Couyat.**—Parasitic phanerogamic plants and nitrates: Marcel **Mirande.** Parasitic phanerogams without chlorophyll cannot absorb nitrates from their hosts. The green hemiparasites vary, some being capable of absorbing nitrates from the host, others not.—Variation in the ramification of umbels: H. **Ricôme.**—The causes of the death of the young hippopotamus of the museum menagerie: E. L. **Trouessart.** The animal died from injuries to the head caused by the mother in repelling the young hippopotamus from the breast.—The culture of the turbot: R. **Anthony.**—The subterranean waters of the Basque country: E. A. **Martel.**

NEW SOUTH WALES.

Linnean Society, July 31.—Mr. A. H. Lucas, president, in the chair.—The geology of Newbridge, near Bathurst, N.S.W.: W. Noel **Benson.**—Revision of the Australian species of the genus Anthobosca (Hymenoptera: fam. Scoliidæ), with descriptions of new species: R. E. **Turner.** By careful comparison with exotic species in the British Museum collection, the author has convinced himself that the insects classed in the genus Anthobosca are the male sex of the insects usually known in Australia as Dimorphoptera (Sm.).—The Mollusca of the Mast Head Reef, Capricorn Group, Queensland, part ii.: C. **Hedley.** This part enumerates the Gastropoda collected on and around Mast Head. Thirty-seven new species are described and figured. The geographical range of shells previously only noted on the one part from Torres Strait, on the other from the neighbourhood of Sydney, is greatly enlarged. Altogether, two hundred and two mollusca are added to the known fauna of Queensland.

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